Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
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FEB 27 1990

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 905 517 864

Richard E. Hahn, Esq.
MA Hanna Company
1301 East Ninth Street, Suite 3600
Cleveland, Ohio 44114-1824

Dear Mr. Hahn:

Re: L.E. Carpenter Amended Administrative Order on Consent (ACO), between New Jersey Department of Environmental Protection and L.E. Carpenter and Co., signed September 26, 1986

Following the meeting between representatives of L.E. Carpenter and the NJ Department of Environmental Protection (Department) held on February 8, 1990 at which time the question was broached as to whether this remedial project would follow the technical requirements enumerated in the amended ACO or those of the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Department reviewed the situation. The Department has decided that, to assure that public health and the environment are uncompromisingly protected, additional effort beyond the ACO requirements is needed particularly since the site is on the National Priority List and all SARA requirements must be met before delisting. Therefore, the remedial investigation and feasibility study for the L.E. Carpenter Site shall be conducted in such a manner to satisfy the requirements of SARA. Discussion within the Department concluded that the work already invested is generally satisfactory and that in most cases only expansion is required.

Therefore, additional items must be prepared to augment the remedial investigation, e.g. Risk Assessment Section already provided in the draft Remedial Investigation Report, November 30, 1989 and the Initial Screening and Development of Alternatives dated January 30, 1990. To assist in furnishing complete SARA documents the Department has together a list of guidance documents that your contractor, GeoEngineering, can utilize in enhancing the two aforementioned documents.

- NJDEP Risk Assessment Guidelines
- Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual, Part A (EPA/540/1-89/002)
- Risk Assessment Guidance for Superfund: Volume II, Environmental Evaluation Manual (EPA/540/1-89/001)
- Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference (EPA/600/3-89/013)
- Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (EPA/540/G-89/004)

While these guidance documents are an excellent source of information, it is highly recommended that the appropriate personnel at GeoEngineering contact the Department during the preparation of the Development of Alternatives and the Risk/Ecological Assessment.

Since GeoEngineering stated in the referenced meeting that they are familiar with the risk assessment requirements of SARA, the Department recommends that work on the augmentation begin at once.

Pursuant to the requirements of the feasibility study work plan, the Department has decided that it be submitted on or before March 15, 1990, with an earlier submission preferred. Attached herewith for your guidance is the current USEPA Feasibility Study Scope of Work Outline.

Should you have any questions please contact me at (609) 633-1455.

Very truly yours,

E. G. Kaup

Edgar G. Kaup, Case Manager
Bureau of Federal Case Management

EGK:mcs

Enclosures

c: J. Boyer, NJDEP/BEERA
W. Dunnell, GeoEngineering
M. Rodburg, Esq., Lowenstein, Sandler, et al
B. Diepeveen, NJDEP/BGWPA
J. Josephs, USEPA II

FEASIBILITY STUDY

SCOPE OF WORK

FEASIBILITY STUDY SCOPE OF WORK

I. Requirements of Feasibility Study

A. Identify and list all potentially viable remedial action alternatives for the pollution at the site, emanating from the site or which has emanated from the site

B. Develop alternatives to incorporate remedial technologies into a comprehensive, site-specific approach

C. Evaluate and compare remedial action alternatives

D. Recommend an environmentally sound remedial action alternative which will, in a timely manner meet each of the following three criteria:

1. Remediate contaminants at the Site, emanating from the Site, or which have emanated from the Site in compliance with the following:

a. Applicable regulatory standards, including but not limited to those promulgated for air, soil, surface-water and ground-water (e.g., N.J.A.C. 7:14A-1 et seq., 7:9-4, 7:9-6); or,

b. where no applicable regulatory standards (as described in a. above) exist, then federal or State non-promulgated advisories or guidance which shall ensure protection of human health and the environment for all media and which shall not result in non-compliance with any regulatory standards applicable to any media at the site,

2. remedy damage to the environment (e.g., restoration of natural resources); and,

3. provide for protection of human health and the environment (e.g., deed restrictions limiting access, eliminating migration of contaminants from the site).

II. Contents of Feasiblity Study Work Plan

A. A statement of the requirements for the feasibility study pursuant to Section I., above

B. A detailed schedule for all feasibility study activities including

1. schedule of key interim dates in feasibility study

2. dates for submission of all permit applications required for completion of feasibility study

3. date for submitting feasibility study report to the Department

C. Development of Alternatives

1. Establish remedial action objectives by:

a. specifying contaminants

b. specifying media of concern

c. identifying potential exposure routes and receptors

d. specifying remediation goals as identified by the Department

2. Develop general response actions for each medium of concern by defining potential response actions, singly or in combination, that may be taken to satisfy the remedial action objectives for the site (e.g. containment, treatment, excavation and pumping)

3. Identify volumes or areas of media to which general response actions may be applied

D. A presentation of initial screening procedures in accordance with the following:

1. Identify those technologies and process options that are applicable to the contaminants present, their physical matrix and other site characteristics

2. Perform an initial screening of alternatives based on the following:

   a. effectiveness in minimizing residual risk and affording long term protection in a timely manner

   b. implementability, including the technical feasibility and availability of the technologies

   c. cost

E. A presentation of characteristics to be used to describe remedial action alternatives remaining after initial screening in accordance with the following:

   1. describe appropriate treatment and disposal technologies, as well as any permanent facilities required

   2. specify engineering considerations required to implement the alternative (e.g., treatability study, pilot treatment facility, additional studies needed to proceed with final remedial design)

3. describe environmental and human health impacts and propose methods for mitigating or eliminating any adverse impacts

4. describe operation and maintenance/monitoring requirements of the completed remedy

5. describe offsite disposal needs and transportation plans

6. describe temporary storage requirements

7. describe requirements for health and safety plans during remedial implementation (including both onsite and offsite health and safety considerations)

8. describe how the alternative could be phased into individual operable units, including how various components of the remedy could be implemented individually or in groups resulting in a functional phase of the overall remedy

9. describe how the alternative could be segmented into areas to allow implementation of differing phases of the alternative

10. describe how alternatives could be combined to create more effective alternatives

11. describe which Federal, State and local permits would be necessary for each alternative identified and outline the

information necessary for the development of each of the permit applications

12. describe the time required for implementation, including significant interim dates

F. A detailed discussion of procedures to evaluate and compare the remedial action alternatives that remain after the initial screening in accordance with the following:

1. overall protection of human health and the environment

2. compliance with D.1, above

3. long term effectiveness and permanence

4. Reduction of toxicity, mobility or volume

5. short term effectiveness

6. implementability

7. cost

8. community acceptance

G. Presentation of procedure concerning recommendation of remedial action alternative in accordance with the following:

1. based on the detailed evaluation process, recommend an environmentally sound remedial action alternative which will, in a timely manner, meet the requirements in Section I. D. and II F above

2. prepare a detailed rationale for recommending the remedial action alternative, stating the advantages over other alternatives considered

III. Content of Feasibility Study Report

A. Detailed discussion of initial screening of remedial action alternatives according to the approved FS Work Plan

B. Detailed description of remedial action alternatives that remain after initial screening according to the approved FS Work Plan

C. Detailed evaluation and comparison of remedial action alternatives based on the descriptions presented pursuant to the approved FS Work Plan

D. Recommendation of and rationale for an environmentally sound remedial alternative which meets the requirements in Section I. D.

and II F, above, in the most timely manner and according to the approved FS Work Plan

E. List of all references used in feasibility study

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Anthony J. Farro
Director

HAZARDOUS SITE SCIENCE ELEMENT
INTERIM NJDEP SOIL ACTION LEVELS

Total Petroleum Hydrocarbons (TPHC)	100 ppm
Surrogate Levels:	
Acid Extractables (AE)	Case-by-Case
Base Neutrals (BN)	10 ppm
Volatile Organics (VOC)	1 ppm
Pesticides	
DDT	1-10 ppm
Chlordane	1 ppm
Other	Case-by-Case
Polychlorinated Biphenyls (PCB)	1-5 ppm
Inorganics:	
Antimony	10 ppm
Arsenic	20 ppm
Barium	400 ppm
Beryllium	1 ppm
Cadmium	3 ppm
Chromium	100 ppm
Copper	170 ppm
Lead	250-1,000 ppm
Nickel	100 ppm
Mercury	1 ppm
Molybdenum	1 ppm
Selenium	4 ppm
Silver	5 ppm
Thallium	5 ppm
Vanadium	100 ppm
Zinc	350 ppm
Polycyclic Aromatic Hydrocarbons (PAH)	10 ppm

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ppm = Parts per million (mg/kg

The action levels are reference numbers used to identify presence of contamination. All contamination identified at a site above the action level should have horizontal and vertical extent delineated. Specific cleanup objectives are developed on a case-by-case basis (and may be the action levels in some instances).